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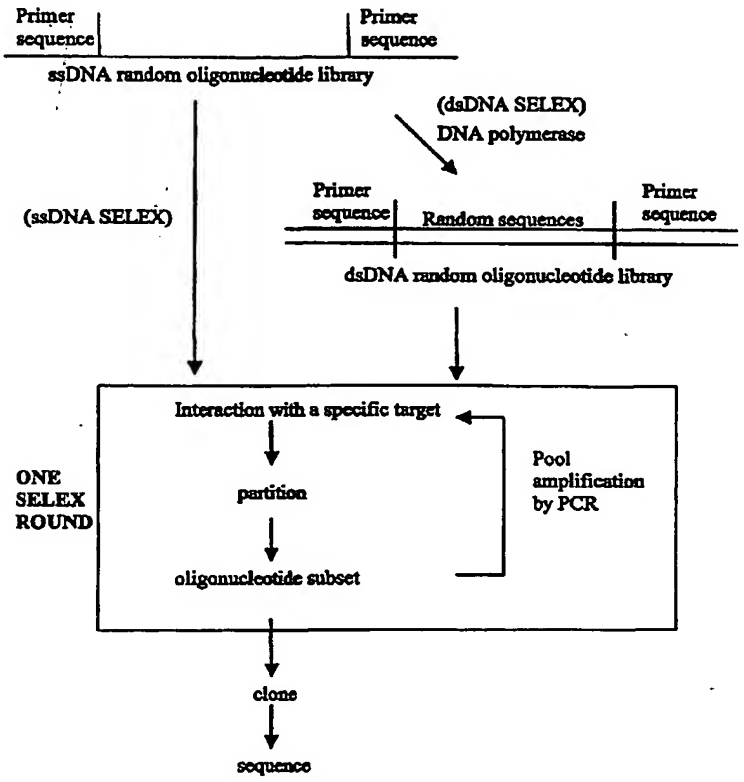
(54) Title: INHIBITION OF METALLO-BETA-LACTAMASE



(57) Abstract: A method to identify a high affinity nucleic acid ligand to inhibit the activity of a lactamase enzyme. The method comprises several steps that initially involve preparing a candidate mixture of nucleic acids. The candidate mixture of nucleic acids is then allowed to make contact with the lactamase enzyme under controlled conditions of temperature, ionic strength and pH; the combination forms a candidate-enzyme mixture. The target nucleic acids are partitioned from the remainder of the candidate mixture. The target nucleic acids that have been partitioned are amplified to yield a pool of nucleic acids enriched with target nucleic acid sequences. The enriched pool of target nucleic acids have a relatively higher affinity and specificity for binding to the lactamase, whereby nucleic acid ligand of the lactamase are identified. Nucleic acid ligands that inhibit an activity of lactamase. The lactamase includes class B, metallo-β-lactamase.

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